

**2008 SUMMER INTERNSHIP OPPORTUNITIES  
SOUTH FLORIDA WATER MANAGEMENT DISTRICT**

Job Reference #	Project Title	Class	Major	Internship Period	Specific Work to be Performed	SFWMD Title
NB50073942	Everglades Restoration Design Team	Junior/Senior	Civil or Environmental Engineering	6/2/2008 to 8/22/08	Intern will be assigned to one or more restoration projects. He/she will be integrated into the design team in developing engineering solutions for developing design plans and specifications in the time, scope, and cost of the project.	Engineering Specialist 1
NB50069703	Impact of Climate Change and Variability on Water Resources	Senior/Graduate	Civil Engineering	6/2/2008 to 8/22/08	Determine the extent of sea level rise and evaluate projections. Determine rainfall projections for south Florida. Modeling for impacts of the above.	Engineering Specialist 1
NB50070336	Testing Regional Simulation Model - Water Quality Module at Different Complexity Levels	Doctoral, Yr 2	Environmental Science, Engineering	6/2/2008 to 8/22/08	Review literature on biogeochemical cycling of phosphorus in wetlands. Compile and synthesize existing data. Formulate preliminary algorithms at different levels of complexity. Test algorithms with Regional Simulation Model - Water Quality and compare results.	Scientist 1
NB50070358	Regional Simulation Model Development	Doctoral, Yr 2	Engineering, Environmental Science	6/2/2008 to 8/22/08	Propose a formulation to manage water demands and supply. Review existing methods for water management. Create a formulation for MSE based optimization methods.	Scientist 1
NB50070370	Evaluate Quality Assurance /Quality Control Needs for RECOVER Monitoring Contracts	Junior/Senior	Environmental Science, Biology, Chemistry	6/2/2008 to 8/22/08	Meet with RECOVER ecological monitoring contract principal investigators and perform field visits on each of their projects. Under the direction of Lead Scientist, will evaluate level of, and need for revision or improvement in the QAQC procedures of each contract. Develop and refine QAQC standards for ecological monitoring contracts.	Scientist 1
NB50070382	Radio Frequency Communication Project	Senior	Electrical Engineering specializing in Communications	6/2/2008 to 8/22/08	In a team environment design, implement engineering solutions for deployment and operation of RF Frequency redeployment project. Coordinate between site project managers and staff engineers. Produce documentation of all sites (present and future) that are part of project. Assist network team in testing, benchmarking from the RTU to the base station all the way through to the Telvent system.	Staff Electronics Engineer
NB50070402	North Spur Microwave Expansion (St. Cloud Field Station and North Shore Pump Stations)	Senior	Electrical Engineering specializing in Communications	6/2/2008 to 8/22/08	In a team environment design, implement engineering solutions for the deployment, operation of Microwave/Network System. Coordinate between site project managers and staff engineers. Document each North Spur Microwave Project site. Assist network team in testing, benchmarking components of the North Spur Microwave system.	Staff Electronics Engineer
NB50070526	Internal Audit Projects (Various)	Graduate, Yr 1 or Yr 2	Accounting	6/2/2008 to 8/22/08	Assist Auditors with performing audit procedures on various audit projects pursuant to the FY 2008 Audit Plan. Assist with audits of Acceler8 contracts, the SBE Program, and General Engineering Services Contracts.	Consulting Auditor
NB50070531	Catalog Governing Board Meeting Records	Junior, Senior, Graduate	Records Mgmt/Library Science	6/2/2008 to 8/22/08	Catalog, organize VHS, DVD, CD, 8 mm tapes and other e-media of Governing Board meeting recordings to be readily accessible for retrieval plus update and input cataloging information in database. Assist in cataloging and organizing other Governing Board meeting records.	Records Information Specialist
NB50070535	Evaluate and Assess Flow Rating Equations at Water Control Structures	Junior, Senior, Graduate	Civil, Environmental Engineering w/Water Resources Emphasis	6/2/2008 to 8/22/08	Gain understanding of installation and maintenance of surface water stage monitoring network. Perform hydraulic calculations to estimate flow data at water control structures. Participate in stream gauging exercises. Develop rating equations to estimate flow data from stream gauging data at water control structures.	Engineering Specialist 1
NB50070542	Evaluate and Assess NEXRAD Rainfall and Rain Gauge Data	Junior, Senior, Graduate	Civil, Environmental Engineering w/Water Resources Emphasis	6/2/2008 to 8/22/08	Gain understanding of installation and maintenance of rain gauge tools. Participate in stream gauging exercises. Perform statistical data analysis comparing rainfall data with radar precipitation estimates. Evaluate impact of rainfall on total water inventory budget. Compare accuracy of Vieux data with OneRain data to evaluate improvement in data accuracy.	Engineering Specialist 1
NB50070558	Radio Frequency Communication Project	Graduate, Yr 1	Engineering w/Computer Programming	6/2/2008 to 8/22/08	In a team environment design and implement engineering and programming solutions for deployment and operation of telemetric equipment. Routine programming of datalogger devices using C and Basic programming languages. Assist in delivering command and control services to support water control operations. Assist in performing project test procedures in a lab environment. Participate in field infrastructure equipment modification activities related to the RFCP project.	Systems Engineering Analyst

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NB50070566	Water Shortage Compliance/Enforcement Support	Junior, Senior	Natural Science, Engineering, Biology	6/2/2008 to 8/22/08	Review, validate field documentation of alleged water restriction violations. Research, confirm property ownership. Determine status of Water Use Permit using GIS tools and databases. Complete on-line enforcement referral. Assist with entering, issuing, tracking, follow-up of Notices of Violations/Consent Agreements. General duties working with software and communicating with the regulated public.	Scientist 1
NB50070572	Water Shortage Allocation Analysis	Junior, Senior, Graduate	Geology, Environmental Science	6/2/2008 to 8/22/08	Compile and analyze data submitted in compliance with existing Water Use Permits. Compare District methods of determining an appropriate water allocation versus actual use and other allocation methodology. Conduct field work and site inspections to learn common irrigation practices and apply knowledge to assignment.	Scientist 1
NB50070687	Water Resource Database Development	Graduate	Urban and Regional Planning	6/2/2008 to 8/22/08	Identify and list potable water consumption rates for residential and non-residential uses, as they appear in the CUPs, Regional Water Supply Plans, and local government's comprehensive plans. Identify details of population projections (time spans and intervals) of population projections as adopted by local governments in their comprehensive plans.	Staff Planner
NB50070745	Lake Okeechobee In-Lake Assessment	Senior, Graduate	Environmental Science, Aquatic Science	6/2/2008 to 8/22/08	Field collection of various ecosystem components including submerged aquatic vegetation, plankton, water quality, invertebrates, and fish. Processing samples in the laboratory. Related data entry and management.	Scientist 1
NB50070747	Laboratory Internship	Junior, Senior, Graduate	Chemistry, Biology, Environmental Science	6/2/2008 to 8/22/08	Assist Chemist with remote nutrient analyzer network maintenance and development. Assist with mercury analysis in fish tissue. Assist with algal toxins analysis. Conduct other laboratory activities as required.	Scientist 1
NB50070755	Data Quality System in Water Quality Monitoring and Environmental Assessment	Graduate, Yr 2 or above	Environmental Chemistry, Natural Resources, Soil Science, Ecology	6/2/2008 to 8/22/08	Assist in reviewing and updating quality system standard operating procedures; and/or reviewing and commenting on monitoring plans and auditing reports; data quality investigation and database management; and inter-laboratory performance evaluation.	Scientist 1
NB50070761	Loxahatchee Impoundment Landscape Assessment (LILA) Research, Education/Outreach	Senior, Graduate, Yr1	Sciences and/or Communication, prefer experience/education in biology	6/2/08 to 6/2/09	Develop print material, video and presentations about LILA research. Assist site manager with field operations including conducting research.	Scientist 1
NB50070763	Paleoecological Reconstruction of Pre-Drainage and Modern Vegetation in the Everglades Ridge-and-Slough Landscape (Water Conservation Area-2A)	Junior, Senior	Biology, Environmental Sciences, Hydrology, Wildlife Ecology, or related field	5/1/08 to 6/2/09	This is a scientific position responsible for conducting paleoecological research pertaining to vegetation changes in Everglades marsh and tree island habitats. The position will involve: microscope and other laboratory work to identify plant fossils from peat cores; design of student research project; review of paleoecological and Everglades literature; and summarizing and statistically analyzing ecological data. The position may also involve some field work under Florida wetland conditions (heat, working in waders, mosquitoes). Coursework in hydrology, aquatic ecology, and environmental chemistry are desired as well as knowledge of South Florida. The individual hired for this position should be in pursuit of degree in ecology, environmental science, hydrology, or a related field. This position requires the possession of a valid Florida driver's license.	Scientist 1
NB50070765	Paleoecological Reconstruction of Pre-Drainage and Modern Vegetation in the Everglades southern marl prairies (Everglades National Park)	Junior, Senior	Biology, Environmental Sciences, Hydrology, Wildlife Ecology, or related field	5/108 to 6/2/09	This is a scientific position responsible for conducting paleoecological research pertaining to vegetation changes in marl prairie habitat, Everglades National Park. The position will involve: microscope and other laboratory work to identify plant fossils recovered from marl soils; design of a student research project; review of paleoecological and Everglades literature; and summarizing and statistically analyzing ecological data. The position may also involve some field work under Florida wetland conditions (heat, working in waders, mosquitoes). Coursework in hydrology, aquatic ecology, and environmental chemistry are desired as well as knowledge of South Florida. The individual hired for this position should be in pursuit of degree in ecology, environmental science, hydrology, or a related field. This position requires the possession of a valid Florida driver's license.	Scientist 1